

ABSTRACT

A mixer circuit of a receiving system, requiring low noise characteristics at lower frequency, includes a bypass current source (41) which is connected in parallel with an LO transistor (21) between an IF output terminal (33) and a drain terminal of an RF transistor (11), and a bypass current source (42) which is connected in parallel with an LO transistor (22) between an IF output terminal (34) and the drain terminal of the RF transistor (11), thereby decreasing a current flowing through the LO transistors (21, 22) without decreasing a bias current flowing through the RF transistor (11). Accordingly, it is possible to suppress flicker noises occurring from the LO transistors (21, 22) without lowering the gain of the mixer, thereby realizing a mixer circuit with excellent low frequency noise characteristics, which can improve the NF characteristics at lower frequency.